Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 07.06.2024 *Version number 4* *Revision: 07.06.2024*

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SECTION 1: Identification of the substance/mixture and of the company/undertaking

· **1.1 Product identifier**

· **Trade name: Glycine**
· **Synonyma** Glycocoll

· **Article number:** 23390
· **CAS Number:**
56-40-6
· **EC number:**
200-272-2
· **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
· **Application of the substance / the mixture:** Laboratory chemicals

· **1.3 Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
SERVA Electrophoresis GmbH
Carl-Benz-Str. 7
D-69115 Heidelberg
Tel.: +49 6221 13840-0
FAX: +49 6221 13840-10
msds.info@serva.de

· **Information department:** Product Safety Department Tel.: +49 6221 13840-35
· **1.4 Emergency telephone number:**
Emergency medical information in case of poisoning
Poison Information Centre Mainz-Tel: +49 (0) 6131 19240
(Counselling in German and English)

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SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**
· **Classification according to Regulation (EC) No 1272/2008:**
The substance is not classified, according to the GB CLP regulation.

· **2.2 Label elements**
· **Labelling according to Regulation (EC) No 1272/2008:** Void
· **Hazard pictograms:** Void
· **Signal word:** Void
· **Hazard statements:** Void
· **2.3 Other hazards**
· **Results of PBT and vPvB assessment:**
· **PBT:**
The substance is not a PBT substance.
PBT - Assessment not available.
· **vPvB:**
The substance is not a vPvB substance.
vPvB - Assessment not available.
· **Determination of endocrine-disrupting properties** No further relevant information available.

*
SECTION 3: Composition/information on ingredients

· **3.1 Substances**
· **CAS No. Description:**
56-40-6 glycine
· **Identification number(s):**
· **EC number:** 200-272-2

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· ***Description:***
· ***Empirical formula:*** $C_2H_5NO_2$
· ***MW:*** *75.07*

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SECTION 4: First aid measures

· ***4.1 Description of first aid measures***
· ***General information:*** *No special measures required.*
· ***After inhalation:*** *Supply fresh air; consult doctor in case of complaints.*
· ***After skin contact:***
Wash off immediately with soap and water and rinse thoroughly. In case of complaints, consult a doctor.
· ***After eye contact:***
Rinse opened eye for several minutes with running water. Remove contact lenses, if possible, and continue rinsing. In case of complaints, consult an ophthalmologist.
· ***After swallowing:***
Wash out mouth. Drink plenty of water and supply fresh air. Consult doctor if you feel unwell.
Do not induce vomiting!
· ***4.2 Most important symptoms and effects, both acute and delayed***
No further relevant information available.
· ***4.3 Indication of any immediate medical attention and special treatment needed***
No further relevant information available.

*
SECTION 5: Firefighting measures

· ***5.1 Extinguishing media***
· ***Suitable extinguishing agents:***
CO_2, *extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.*
· ***5.2 Special hazards arising from the substance or mixture:***
Formation of hazardous vapours and gases possible during heating or in case of fire.
In case of fire, the following can be formed, but not limited to:
Nitrogen oxides (NOx)
Carbon monoxide and carbon dioxide
Ammonia (NH_3)
· ***5.3 Advice for firefighters***
· ***Protective equipment:*** *Wear self-contained breathing apparatus.*
· ***Additional information***
Collect contaminated fire fighting water separately. It must not enter the sewage system.
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

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SECTION 6: Accidental release measures

· ***6.1 Personal precautions, protective equipment and emergency procedures***
Wear protective clothing.
Ensure adequate ventilation
Avoid formation of dust.
· ***6.2 Environmental precautions:*** *Do not allow to enter sewers/ surface or ground water.*
· ***6.3 Methods and material for containment and cleaning up***
Dispose contaminated material as waste according to section 13.
Pick up mechanically.
· ***6.4 Reference to other sections***
See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

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SECTION 7: Handling and storage

· ***7.1 Precautions for safe handling:***
Ensure good ventilation/exhaustion at the workplace.
No special measures required.
Prevent formation of dust.
· ***Information about protection against explosions and fires:*** *Keep ignition sources away - Do not smoke.*

· ***7.2 Conditions for safe storage, including any incompatibilities***
· ***Storage***
· ***Requirements to be met by storerooms and receptacles:*** *Store only in the original receptacle.*
· ***Information about storage in one common storage facility:*** *Not required.*
· ***Further information about storage conditions:*** *Store containers tightly closed and dry.*
· ***7.3 Specific end use(s):*** *No further relevant information available.*

*
SECTION 8: Exposure controls/personal protection

· ***8.1 Control parameters***
· ***Components with limit values that require monitoring at the workplace:*** *Not required.*
· ***Additional information:*** *The lists that were valid during the creation were used as basis.*

· ***8.2 Exposure controls***
· ***Appropriate engineering controls:*** *No further data; see section 7.*
· ***Individual protection measures, such as personal protective equipment:***
· ***General protective and hygienic measures:***
Keep away from foodstuffs, beverages and feed.
Store protective clothing separately.
Immediately remove all soiled and contaminated clothing
Avoid contact with the eyes and skin.
Wash hands before breaks and at the end of work.
· ***Breathing equipment:*** *Suitable respiratory protective device recommended.*
· ***Hand protection:***
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
· ***Material of gloves:***
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
· ***Penetration time of glove material:***
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
· ***For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:***
Natural rubber, NR
· ***Eye/face protection:*** *Safety glasses*
· ***Body protection:*** *Protective work clothing.*

*
SECTION 9: Physical and chemical properties

· ***9.1 Information on basic physical and chemical properties***
· ***General Information:***

· ***Physical state:***	*Solid.*
· ***Colour:***	*white to almost white*
· ***Odour:***	*Odourless*

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· **Odour threshold:**	Not determined.
· **Melting point/freezing point:**	240°C (decomposition)
· **Boiling point or initial boiling point and boiling range:**	not applicable (decomposition)
· **Flammability:**	No information available
· **Lower and upper explosion limit:**	
· **Lower:**	No information available
· **Upper:**	No information available
· **Flash point:**	No information available
· **Auto-ignition temperature:**	no information available
· **Decomposition temperature:**	> 233 °C
· **pH:**	5.9-6.4
· **Viscosity:**	
· **Kinematic viscosity:**	No information available
· **Dynamic viscosity:**	No information available
· **Solubility:**	
· **Water:**	Soluble
· **Partition coefficient n-octanol/water (log value):**	No information available
· **Vapour pressure:**	Not applicable.
· **Density and/or relative density:**	
· **Density at 20 °C:**	1.161 g/cm³
· **Relative density:**	No information available
· **Particle characteristics**	No information available

· **9.2 Other information**	
· **Appearance:**	
· **Form:**	Crystalline
· **Important information on protection of health and environment, and on safety:**	
· **Explosive properties:**	The product is not explosive, but the formation of explosive dust/air mixtures is possible.
· **Molecular weight**	75.1 g/mol

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SECTION 10: Stability and reactivity

· **10.1 Reactivity:** No further relevant information available.
· **10.2 Chemical stability:**
· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
· **10.3 Possibility of hazardous reactions:** No further relevant information available.
· **10.4 Conditions to avoid:** High temperatures
· **10.5 Incompatible materials:**
Avoid contact with:
Strong oxidizers
organic solvents
· **10.6 Hazardous decomposition products:** In case of fire: see section 5

*
SECTION 11: Toxicological information

· **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008:**
· **Acute toxicity:** Based on available data, the classification criteria are not met.
· **Skin corrosion/irritation:** Based on available data, the classification criteria are not met.
· **Serious eye damage/irritation:** Based on available data, the classification criteria are not met.
· **Respiratory or skin sensitisation:** Based on available data, the classification criteria are not met.
· **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.
· **Carcinogenicity:** Based on available data, the classification criteria are not met.
· **Reproductive toxicity:** Based on available data, the classification criteria are not met.

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· ***STOT-single exposure:*** *Based on available data, the classification criteria are not met.*
· ***STOT-repeated exposure:*** *Based on available data, the classification criteria are not met.*
· ***Aspiration hazard:*** *Based on available data, the classification criteria are not met.*
· ***11.2 Information on other hazards:***
· ***Endocrine disrupting properties:*** *No relevant information available*

*
SECTION 12: Ecological information

· ***12.1 Toxicity:***
· ***Aquatic toxicity:*** *No further relevant information available.*
· ***12.2 Persistence and degradability:*** *No further relevant information available.*
· ***12.3 Bioaccumulative potential:*** *No further relevant information available.*
· ***12.4 Mobility in soil:*** *No further relevant information available.*
· ***12.5 Results of PBT and vPvB assessment:***
· ***PBT:*** *The substance is not a PBT substance.*
· ***vPvB:*** *The substance is not a vPvB substance.*
· ***12.6 Endocrine disrupting properties:*** *For information on endocrine disrupting properties see section 11.*
· ***12.7 Other adverse effects:***
· ***Additional ecological information:***
· ***General notes:***
Do not allow product to reach ground water, water course or sewage system.
Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water.

*
SECTION 13: Disposal considerations

· ***13.1 Waste treatment methods***
· ***Recommendation*** *Dispose of in accordance with official regulations.*

· ***Uncleaned packagings:***
· ***Recommendation:***
Uncleaned packaging must be disposed of in the same way as the product in accordance with official regulations.
· ***Recommended cleansing agent:*** *Water, if necessary with cleansing agents.*

*
SECTION 14: Transport information

· ***14.1 UN number or ID number***	
· ***ADR, ADN, IMDG, IATA***	*Void*
· ***14.2 UN proper shipping name***	
· ***ADR, ADN, IMDG, IATA***	*Void*
· ***14.3 Transport hazard class(es)***	
· ***ADR, ADN, IMDG, IATA***	
· ***Class:***	*Void*
· ***14.4 Packing group***	
· ***ADR, IMDG, IATA***	*Void*
· ***14.5 Environmental hazards***	
· ***Marine pollutant:***	*No*
· ***14.6 Special precautions for user***	*Not applicable.*
· ***14.7 Maritime transport in bulk according to IMO instruments***	*Not applicable.*

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· ***Transport/Additional information:***	*Not dangerous according to the above specifications.*
· ***UN "Model Regulation":***	*Void*

*
SECTION 15: Regulatory information

· ***15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture***
· ***Poisons Act***
· ***Regulated explosives precursors*** *Substance is not listed.*
· ***Regulated poisons*** *Substance is not listed.*
· ***Reportable explosives precursors*** *Substance is not listed.*
· ***Reportable poisons*** *Substance is not listed.*

· ***Directive 2012/18/EU***
· ***Named dangerous substances - ANNEX I*** *Substance is not listed.*
· ***DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II***
Substance is not listed.
· ***REGULATION (EU) 2019/1148***
· ***Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))***
Substance is not listed.
· ***Annex II - REPORTABLE EXPLOSIVES PRECURSORS*** *Substance is not listed.*
· ***Regulation (EC) No 273/2004 on drug precursors*** *Substance is not listed.*
· ***Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors***
Substance is not listed.

· ***National regulations:***

· ***Water hazard class:*** *Water hazard class 1 (Assessment by list): slightly hazardous for water.*
· ***15.2 Chemical safety assessment:*** *A Chemical Safety Assessment has not been carried out.*

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SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· ***Department issuing SDS:*** *Product Safety Department*
· ***Contact:*** *+49 6221 13840-35*
· ***Date of previous version:*** *30.04.2021*
· ***Abbreviations and acronyms:***
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
PBT: persistent, bioaccumulative, toxic substance (UK REACH)
vPvB: very persistent, very bioaccumulative substance (UK REACH)
UK REACH: Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals
GB CLP: Regulation on classification, labelling and packaging of substances and mixtures
bw: body weight
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative